



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,614	06/30/2000	Brian L. Felsman	199.38514X00	9409

20457 7590 09/26/2003

ANTONELLI, TERRY, STOUT & KRAUS, LLP  
1300 NORTH SEVENTEENTH STREET  
SUITE 1800  
ARLINGTON, VA 22209-9889

EXAMINER

KIANERSI, MITRA

ART UNIT	PAPER NUMBER
----------	--------------

2143

DATE MAILED: 09/26/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/608,614

Applicant(s)

FELSMAN ET AL.

Examiner

mitra kianersi

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) 37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

create a MDP information packet for each message, and transmit the message to each recipient designated in the MDP information packet; (Pg 628, Col 2, Par 2 and 3), and an MDP client operations module to receive messages transmitted by the MDP server operations module, and transmit these messages to a higher level software application. (Pg 628, Col 1, Par 5)

2. Regarding claim 2, a system where the MDP server initialization module will activate GRTT probing upon initial activation, wherein GRTT probing is the periodic sending of messages to the plurality of workstations on the network and measuring the time required to receive a response. (Pg 627, Col 1, Par 2) and (Pg 629, Par 4)

3. Regarding claim 3, a system, wherein the plurality of parameters read by the MDP server initialization module comprise an initial GRTT value, a maximum GRTT value, a GRTT probe minimum interval value, and a GRTT probe maximum interval value. (Pg 628, Col 2, Par 3)

4. Regarding claim 4, a system, wherein the MDP server operations module further comprises: means for generating a GRTT probe in order to measure a greatest round-trip time between a server and each workstation of the plurality of workstations and updating the GRTT initial value stored in the MDP database table. (Pg 627, Col 1, Par 2) and (Pg 629, Par 4)

5. Regarding claim 5, wherein the GRTT probe is periodically transmitted to each workstation of the plurality of workstations starting at the GRTT probe minimum interval value and increasing an interval between transmissions of the GRTT probe until the interval equals the GRTT probe maximum interval value. (Pg 628, Col 2, Par 2 and 3)

6. Regarding claim 6, Macker et al. teach a system, wherein the plurality of parameters read by the MDP server initialization module comprise an initial GRTT

Claims 1-37 have been examined.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Macker et al.  
(IEEE. 7803-5538, 5/1999)

1. Regarding claim 1, Macker et al. teaches a system to multicast messages to a plurality of workstations in a network, comprising:

an MDP database table comprising a plurality of parameters used to manage transmission and reception of multicast messages in the network;(Pg 627, Col 2, Par 1) and (Pg 628, Col 1, Par 1).

an MDP server initialization module to read the plurality of parameters from the MDP database table and initialize an MDP session utilizing the plurality of parameters in a plurality of servers; (Pg 627, Col 2, Par 4)

an MDP client initialization module to read the plurality of parameters from the MDP database table and initialize an MDP session utilizing the parameters in a plurality of workstations;(Pg 628, Col 1, Par 4)

an MDP server operations module to receive requests to transmit messages,

value, a recovery cycle, a server compensation factor, a block size, and a segment size.  
(Pg 628, Col 1, Par 1,2 and 3)

7. Regarding claim 7, Macker et al. teaches a system, wherein the MDP server operations module computes a server squelch time based on the recovery cycle, the initial GRTT value, the server compensation factor, the block size, and a segment size.  
(Pg 627, Col 2, Par 2)

8. Regarding claim 8, Macker et al. teaches a system, wherein the MDP server operations module will de-queue a message when the servers squelch time expires. (Pg 628, Col 2, par 1)

9. Regarding claim 9, Macker et al. teaches a MDP server operations module further comprises means for computing a server squelch time; (Pg 628, Col 2, Par 3) and means for stopping GRTT probing and de-queuing a message when the server squelch time expires. (Pg 628, Col 2, Par 2)

10. Regarding claim 10, Macker et al. teaches a system, wherein the MDP client initialization module reads a stream integrity value and a nacking mode value from the MDP database table. (Pg 628, Col 1, Par 5) and (Pg 629, Col 1, Par 1)

11. Regarding claim 11, Macker et al. teaches a system, wherein the MDP client operations module will send a negative acknowledgment only upon receipt of an MDP information packet when a field in the MDP information packet indicates that the workstation on which the MDP client operations module executes is an info client (Pg 628, Col 2, Par 4).

12. Regarding claim 12, Macker et al. teaches a system, wherein the MDP client operations module will send a negative acknowledgment when a message is received with missing elements when the MDP information packet designates the workstation on

which the MDP client operations module executes is an action client (Pg 628, Col 1, Par 2 and Col 2, Par 5).

13. Regarding claim 13, Macker et al. teaches a system, wherein the MDP client operations module will compute a message delay time based upon a message size and a maximum transmission rate and will wait for a period time equal to the message delay time upon receipt of an MDP information packet (Pg 628, Col 2, Par 6).

14. Regarding claim 14, Macker et al. teaches a system, wherein the MDP client operations module further comprises: means to compute a client squelch time (Pg 628, Col 1, Par 5 and Col 2, Par 3); and means to terminate reception of a message when the client squelch time has expired (Pg 628, Col 2, Par 1 and 2).

15. Regarding claim 15, Macker et al. teaches a computer program executable by computer embodied on a computer readable medium to multicast messages to a plurality of workstations in a network, (Pg 627, Col 2, Par 1) and (Pg 628, Col 1, Par 1) comprising an MDP database table comprising a plurality of parameters used to manage transmission and reception of multicast messages in the network; ; (Pg 627, Col 2, Par 4) an MDP server initialization code segment to read the plurality of parameters from the MDP database table and initialize an MDP session utilizing the plurality of parameters in a plurality of servers;(Pg 627, Col 2, Par 4)  
an MDP client initialization code segment to read the plurality of parameters from the MDP database table and initialize an MDP session utilizing the parameters in a plurality of workstations; (Pg 628, Col 1, Part 4)  
an MDP server operations code segment to receive requests to transmit messages, create a MDP information packet for each message, and transmit the message to each recipient designated in the MDP information packet; (Pg 628, Col 2, Par 2 and 3) and an MDP client operations code segment to receive messages transmitted by the MDP server operations code segment, and transmit these messages to a higher level software application.(Pg 628, Col 1, Par5)

16. Regarding claim 16 a computer program, wherein the MDP server initialization code segment will activate GRTT probing upon initial activation, wherein GRTT probing is the periodic sending of messages to the plurality of workstations on the network and measuring the time required to receive a response. (Pg 627, Col 1, Par 2) and (Pg 629, Par 4)

17. Regarding claim 17 a computer program, wherein the plurality of parameters read by the MDP server initialization code segment comprise an initial GRTT value, a maximum GRTT value, a GRTT probe minimum interval value, and a GRTT probe maximum interval value. (Pg 628, Col 2, Par 3)

18. Regarding claim 18 where the MDP server operations code segment further comprises means for generating a GRTT probe in order to measure a greatest round-trip time between a server and each workstation of the plurality of workstations and updating the GRTT initial value stored in the MDP database table. (Pg 627, Col 1, Par 2) and (Pg 629, Par 4)

19. Regarding claim 19 a computer program, wherein the GRTT probe is periodically transmitted to each workstation of the plurality of workstations starting at the GRTT probe minimum interval value and increasing an interval between transmissions of the GRTT probe until the interval equals the GRTT probe maximum interval value. (Pg 628, Col 2, Par 2 and 3)

20. Regarding claim 20, Macker et al. teaches a computer program wherein the plurality of parameters read by the MDP server initialization code segment comprise an initial GRTT value, a recovery cycle, a server compensation factor, a block size, and a segment size (Pg 628, Col 1, Par 1, 2 and 3).

21. Regarding claim 21, Macker et al. teaches a computer program, wherein the MDP server operations code segment computes a server squelch time based on the recovery cycle, the initial GRTT value, the server compensation factor, the block size, and a segment size (Pg 628, Col 1, Par 1, 2, and 3).

22. Regarding claim 22, Macker et al. teaches a computer program, wherein the MDP server operations code segment will de-queue a message when the servers squelch time Expires (Pg 627, Col 2, Par 2)

23. Regarding claim 23 a computer program, wherein the MDP server operations code segment further comprises: means for computing a server squelch time; and means for stopping GRTT probing and de-queuing a message when the server squelch time expires. (Pg 628, Col 2, Par 2)

24. Regarding claim 24, Macker et al. teaches a computer program, wherein the MDP client initialization code segment read; a stream integrity value and a nacking mode value from the MDP database table. (Pg 628, Col 1, Par 5)

25. Regarding claim 25, Macker et al. teaches a computer program, wherein the MDP client operations code segment will send a negative acknowledgment only upon receipt of an MDP information packet when a field in the NIDP information packet indicates that the workstation on which the MDP client operations code segment executes is an info client. (Pg 628, Col 2, Par 4)

26. Regarding claim 26, Macker et al. teaches a computer program, wherein the MDP client operations code segment will send a negative acknowledgment when a message is received with missing elements when the MDP information packet



designates the workstation on which the MDP client operations code segment executes is an action client (Pg 628, Col 1, Par 2 and Col 2, Par 5).

27. Regarding claim 27, Macker et al. teaches a computer program, wherein the MDP client operations code segment will compute a message delay time based upon a message size and a maximum transmission rate and will wait for a period time equal to the message delay time upon receipt of an MDP information packet. (Pg 628, Col 2, Par 6)

28. Regarding claim 28, Macker et al. teaches a computer program, wherein the MDP client operations code segment further comprises means to compute a client squelch time; and means to terminate reception of a message when the client squelch time has expired. (Pg 628, Col 2, Par 1 and 2).

29. Regarding claim 29, Macker et al. teaches a method to multicast messages to a plurality of workstations in a network, comprising:  
reading a plurality of parameters from an MDP database used to initialize and control the transmission of a multicast message on a server;  
reading a plurality of parameters from an MDP database used to initialize and control the reception of a multicast message on a workstation; (Pg 628, Col 1, Par 4)  
transmitting the multicast message to a plurality of workstations when a message delay time does not exceed a time computed to transmit the multicast message or the message delay time does not exceed a perishability time contained within multicast message (Pg 628, Col 2, Par 6); and  
transmitting the negative acknowledgment to the server when the workstation determines that data in the multicast message is missing and when the workstation was designated as an action workstation within a field contained within the MDP information packet. (Pg 628, Col 2, Par 2, 3 and 6)

Art Unit: 2143

30. Regarding claim 30, Macker et al. teaches a method, wherein when transmitting the multicast message to the plurality of workstations a GRTT probe is also transmitted periodically to the plurality of workstations in order to determine the greatest round-trip time it takes for a message to be received by a workstation and an acknowledgment to be sent back to a server. (Pg 628, Col 2, Par 2 and 3)

31. Regarding claim 31 Macker et al. teaches a method, wherein when the greatest round trip time is determined, adjusting the plurality of parameters stored in the MDP database based upon the greatest round-trip time. (Pg 627, Col 1, Par 2) and (Pg 629, Par 4)

32. Regarding claim 32 Macker et al. teaches calculating a server squelch time based upon the parameters retrieved from the MDP database; and setting the server squelch time equal to the perishability time when the server squelch time exceeds the perishability time. (Pg 628, Col 2, par 1)

33. Regarding claim 33 Macker et al. teaches monitoring for negative acknowledgments transmitted by workstations to be received the multicast message when the server squelch time has not been exceeded. (Pg 628, Col 2, Par 4).

34. Regarding claim 34 Macker et al. teaches retransmitting a portion of the multicast message when a negative acknowledgment is received from a workstation when all data in the multicast message has not been received and a server squelch time has not been exceeded. (Pg 628, Col 1, Par 2 and Col 2, Par 5)

35. Regarding claim 35 Macker et al. teaches computing a client squelch time based upon the plurality of parameters stored in the MDP database; transmitting a negative acknowledgment when a portion of a multicast message has not been received by the workstation and client squelch time has not been exceeded. (Pg 628, Col 1, Par 5 and Col 2, Par 3)

36. Regarding claim 36 Macker et al. teaches transmitting a negative acknowledgment when a portion of able to cast message has not been received by the workstation occurs only when the workstation has been designated as an action workstation in the MDP information packet. (Pg 628, Col 1, Par 1) and (Pg 628, Col 2, Par 4, 5).

37. Claim 37 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

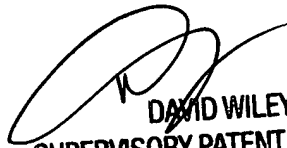
### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitra Kianersi whose telephone number is (703) 305-4650. The examiner can normally be reached on 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Mitra Kianersi  
Sep/10/2003

  
DAVID WILEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100